BARRIERS IN KNOWLEDGE SHARING PROCESS : RECEIVERS PERSPECTIVE

WARATNARN RATCHAMUSIKPAT

A THEMATIC PAPER SUBMITTED IN PARTIAL FULFILLMENTOF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT COLLEGE OF MANAGEMENT MAHIDOL UNIVERSITY 2014

Thematic paper
entitled

BARRIERS IN KNOWLEDGE SHARING PROCESS : RECEIVERS PERSPECTIVE

was submitted to the College of Management, Mahidol University
for the degree of Master of Management
on
January 4, 2014

……
Miss Waratnarn Ratchamusikpat
Candidate

……
Asst. Prof. Vichita Ractham,
Ph.D.
Advisor

……
Assoc. Prof. Sooksan Kantabutra,
Ph.D.
Committee member

……
Assoc. Prof. Annop Tanlamai,
Ph.D.
Dean
College of Management
Mahidol University

……
Asst. Prof. Winai Wongsurawat,
Ph.D.
Committee member

ACKNOWLEDGEMENTS

Firstly, I would like to pass my sincere gratitude to Dr. Vichita Ractham, my Advisor, and committees for providing a valuable advice and supporting me to finish the Thematic Paper.Without her, this research would never have been completed.

In addition, I would like thanking all people who help me during the Thematic Paper, colleagues at work and especially my friends also assisted me well in my study.

Moreover, I would also like to thank Rattiya Phoomkhuntod, who helps me contact to the company and arrange the interview. Many thanks to Khanangrat Rattanathorncharoenchai, who as a good friend, was always willing to help and give her best suggestion. My research would not have been possible without their help.

Also, my thankfulness and appreciation go to my family, my parents for their support and encouragement in my study. They always supported and encouraged me to take a master's degree with their best wishes.

Lastly, I would like to thank my research respondents. Without their help, this study would not be able to conduct.

Waratnarn Ratchamusikpat

BARRIERS IN KNOWLEDGE SHARING PROCESS: RECEIVERS PERSPECTIVE

WARATNARN RATCHAMUSIKPAT 5549119

M.M. (LEADERSHIP AND HUMAN RESOURCE MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASST.PROF.VICHITA RACTHAM, Ph.D., ASSOC. PROF. SOOKSAN KANTABUTRA, Ph.D., ASST. PROF. WINAI WONGSURAWAT, Ph.D.

ABSTRACT

Knowledge is a valuable asset in the organization. Therefore, knowledge sharing becomes an essential part of knowledge management in the organization. This research aims to explore the barriers of knowledge sharing in order to operate processes of knowledge management and knowledge sharing effectively. This study focuses on the knowledge receiver by examining potential barriers that inhibit audience to receive knowledge. There are 3 main components of knowledge sharing which are sender, knowledge, and receiver. The detailed and in-depth interviews are conducted as an crucial information to determine the primary barrier of knowledge sharing. The data is collected by engaging potential respondents who have experienced as knowledge receivers. The barriers in knowledge sharing can be categorized into 3 levels which are individual, organization and technical level. Furthermore, the findings of the study will help company acknowledge the causes and factors of knowledge sharing barrier. As a result, this research analyzes and concludes that communication skill is a significant barrier that directly impact to knowledge sharing process especially at the individual level. In addition, the advancement of knowledge is also the key factor that contributes to the capability of sharing and absorbing knowledge. Moreover, this research also recommends the organization to emphasize on the importance of culture and policy for effective knowledge sharing in both individual and organizational level.

KEY WORDS: Knowledge Sharing / Knowledge Sharing Barriers / Impact Factor/ Impact Barrier

34 pages

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I
INTRODUCTION

Knowledge is the facts, information and skills that acquired through experience or education which can occur in both theoretical and practical understanding of a subject. Therefore, knowledge can be a key asset for driving the organization's objectives and success. The organization, therefore, has to focus and highlight the process of capturing, developing, sharing, and effectively using organizational knowledge which is also known as Knowledge Management. It can also refer to a multi-disciplined approach to achieve the organizational objectives by making the best use of knowledge. As a result, knowledge sharing is the primary component of Knowledge Management in organization. Many researchers suggest that barriers of knowledge sharing can have significant effects to the effectiveness of knowledge management fulfillment. It would affect organizational performance and minimize competitive advantage of the organization in the market. For this reason, the manager should study, focus, create awareness and pay attention on the benefits of knowledge sharing as well as the barriers of knowledge sharing. Thus, this would help the organization to prolong the sustainable growth and success in the market. There are many channels and tools that can be implemented for sharing or transferring knowledge which depend on objectives of knowledge sharing in particular situation.

It is no guaranteed that every audiences or knowledge receivers will feel comfortable when knowledge sharing occurs. Barrier can come from sender, receiver and knowledge itself. The causes of barriers may be due to individual, organizational and technological factors. And barriers could take place at anytime. It can occur before, during or after sharing knowledge which may depend on hidden factors from personal perspective, organizational culture or surrounding atmosphere. In order to overcome these problems, examining knowledge sharing barriers will help organization enhance their performance and gain competitive advantage in the globalization.

In this study, barriers of knowledge sharing process relating to receivers perspective are focused and examined. This study focuses on type of barriers and the causes of barrier in knowledge sharing process in several levels of knowledge audience. The target groups of this research are the receivers who are potentially in individual, organization and technological level at Siam City Cement Company. The personal and in-depth interview was conducted in this research study which particularly in operational level.

The paper is organized as follows: firstly, this study reviews the existing literature on knowledge, knowledge management, and knowledge sharing and barriers. Secondly, research methodology is elaborated and discussed. Thirdly, the chapter presents data analysis, research findings from the interview as well as theoretical and practical recommendations. Finally, the research summary, limitations and suggestion for further research are discussed.

CHAPTER II
LITERATURE REVIEW

In 21st Century, majority of organizations bend their directions towards knowledge value creation due to its increasing importance as part of the key strategic asset for every organization. Devenport (1998) defined knowledge as "a fluid mix of framed experience, values, contextual information, expert insight, and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of the knowers. In organizations it often becomes embedded not only in documents or repositories, but also in organizational routines, practices and norms." (p.5)

Knowledge Management is the information gathering that optimizes the use of knowledge in multi-discipline approaches which can be classified differently depending on dissimilar social groups. It is also the information that contains experience, context, interpretation and reflection. In order to survive and success in technology era, knowledge management is essentially required in every organization. Knowledge helps people to learn and improve themselves both mentally and emotionally. When employees participate in knowledge sharing or involve in knowledge management, they will substantially reflect the ability to achieve and succeed the organization goals. Therefore, knowledge management plays an importance role in organization as it provides competitive advantages to both employee and organization. As a result, the organizations should focus on knowledge management in order to add long-term benefits in wide perspectives as well as to improve business operation and capabilities within the organizations. Thus, KM becomes the essential activity that many organizations from all over the world exercised. Moreover, KM creates a better and easier way for information sharing among staffs and also increases innovation and creates better customer relationship, satisfaction and loyalty. Moreover, effective knowledge management can also reduce cost and mistakes, expand businesses, improve responsiveness and quality of products and services as well as increase profitability.

Knowledge Management (KM) is the process of collecting, managing and transferring employees‟ knowledge in the organization. Sharing knowledge is able to improve existing business processes and bring in efficient and effective business capabilities (Gunjal, 2005). Knowledge Management is also defined as the collection of knowledge in organization which increases innovation and reaction in order to help the organization gain competitive advantage in the present competitive world (Alavi, 1999). Moreover, Kalam (2004) mentioned that KM can help an organization to understand its own capabilities and complete strategic business objectives. It can also solve various problems in knowledge sharing such as barrier of knowledge sharing and inappropriate work environment. Furthermore, KM helps to encompass people to have direct interaction aspects, same direction, goals, mission and vision. KM search and generate opportunities to improve decision makings along with, products and services value creation and adaptability. KM also improves innovation in organization through several techniques such as total quality management (TQM), business process re-engineering (BRP) and organization learning. Broadbent (1997, p.6) identifies KM as “a form of expertise management which draws out tacit knowledge, making it accessible for specific purposes to improve the performance of organization‟s „know-how‟ should be structured, organized, located and utilized to provide the most effective action at that point in time”.

There are three main purposes of knowledge management. The first purpose is to highlight the importance and responsibility of knowledge towards organizations through the means of maps, yellow pages and hypertext tools. The next emphasis is to engage and embolden behaviors to develop knowledge-incentive culture by knowledge sharing and the last objective is to construct knowledge infrastructure for efficient and easier communication (Alavi, 1999).

2.1 Knowledge Management Process

Knowledge Management supports and coordinates the generation, codification or retrieval, transfer and the application of individual knowledge in value creation processes. There are generally four main stages of Knowledge Management

processes, stated by Holzer, Marx and Pentland. The detailed explanation of each stage in Knowledge Management processes are described as below;

(1) Alavi (1999) described Knowledge Creation as it "involves developing new content or replacing existing content within the organization"s knowledge through social and collaborative processes as well as an individual"s cognitive processes". Knowledge creation is specifically categorized into socialization, externalization, internalization and combination which are strongly correlated and dependent on one another.

(2) Knowledge Codification or Retrieval is very crucial in organization. Data and information need to be collected and analyzed in order to turn them into useful knowledge. This is the stage where tacit knowledge is converted into explicit knowledge which can directly affects the successes of the next two stages, Transfer and Application. The necessary and useful information can be stored in many forms such as written document, electronic database, and expert system etc. Furthermore, it can be extended into organization culture and structure, transformations, and ecology. The advancement of modern technology will effectively help the organization to access and utilize the useful information easily, quickly and conveniently by applying query language and database management system (Alavi, 1999). However, knowledge storage may have both positive and negative consequences on manner, behavior and performance.

(3) Knowledge can be adapted and evolved through the processes of learning and sharing. Knowledge Transfer can occur between people to people, people to group, group to group, and group to organization. If the organization has limited capability to effectively use certain knowledge, it would be worthwhile to consider external transfer to third parties who may have the competencies to utilize the knowledge for value creation. The impact made by individual knowledge might not as great and significant as collective knowledge so sharing within the organization should be encouraged. Moreover, the effective knowledge transfer depends on communication, information and types of knowledge (Alavi, 1999). The knowledge transfer or sharing can be implemented through dissimilar manners such as informal, formal, personal or impersonal or different occasions. In addition, many organizations use technology as a tool to improve knowledge sharing processes. To ensure success

of this technology transfer, it is essential that tacit knowledge and procedural knowledge are converted to explicit knowledge for easy learning, adaptation and utilization.

(4) Knowledge Application, Alavi (1999) classified into three fundamental mechanisms to enhance organizational capability. Knowledge Management offers a management system for the company to ensure that their knowledge assets when created are properly documented, and that the knowledge in different domain owners will be shared within the organization. When knowledge assets are documented and shared, knowledge utilization will be facilitated. This is the stage in Knowledge Management where value creation is delivered. By harnessing knowledge from different knowledge domains and competencies across the organization, direct impacts to the missions and goals of the company can be achieved. Advanced information technology can contribute to the efficiency and success knowledge application. It can increase effectiveness of knowledge application by accessing knowledge faster, improving speed of knowledge integration and increasing capability of organization information storage.

On the other hand, there are several factors that might create barriers to hold back and resist the success of knowledge sharing in the organization. Riege (2005) mentioned about wide varieties of barriers that might occur during knowledge sharing processes.

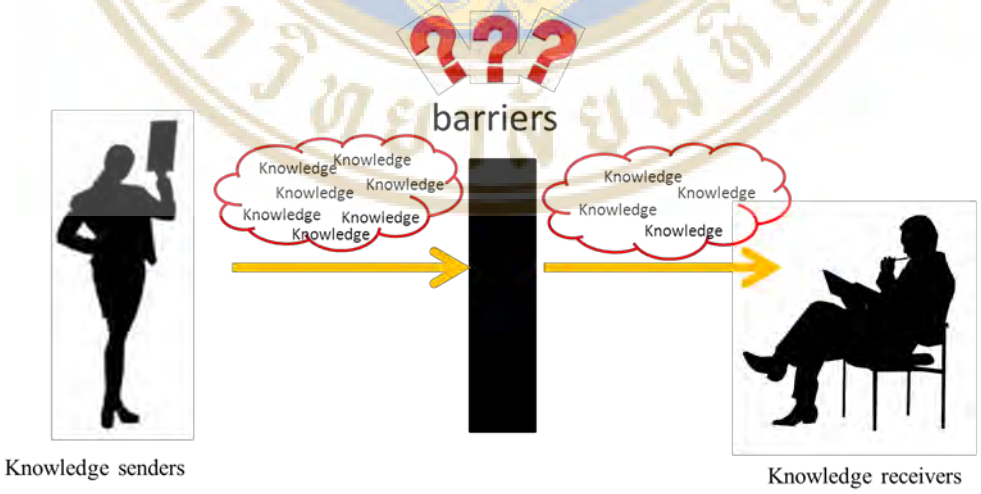


Figure 2.1 Barriers between senders and receivers during knowledge sharing processes

The crucial consequence is the fact that in information and knowledge sharing IT plays an important role but not an essential one. The goal is to turn over the existence of some barriers to information and knowledge sharing in an organization. There are many types of barriers to information and knowledge sharing in organization such as culture barriers, communication barriers, technology barriers and social barriers etc.

Two different approaches can be identified to support information and knowledge sharing in organization. The first approach is based on the change of corporate culture that accommodates to information and knowledge management system. Nonaka and Takeuchi (1995) stated that "Sharing knowledge among multiple individuals with different backgrounds, perspectives and motivation become a critical step for organizational knowledge creation to take place" (p.85). The person who is conducting knowledge sharing might sometimes think that is worthless and unnecessary to share information as the receiver might not generate any benefits from the knowledge sharing. The second one as more successful is based on accommodating of information and knowledge management system to existing corporate culture. Furthermore, knowledge sharing sometimes fails due to the wrong perspectives in adjusting and changing organization culture in order to be compatible to knowledge sharing application.

Vladimir (2003) found that changing corporate culture or facilitating existing corporate culture with knowledge management system are the easiest ways to enhance knowledge sharing. Explicit, implicit and tacit are the object of knowledge. However, social practices of teams, working groups and departments form the subjective components of the information and knowledge are also important. Communication is the factor that also important in sharing knowledge between individuals and groups. Riege (2005) also address about the impacts of communication skill, time and trust that can be added up to the barriers of knowledge sharing between individuals and groups. They reviewed and conclude knowledge sharing barriers in three main structures that linked to individual employees, companies‟ systems and processes and integrated technologies (Riege, 2005). Therefore, sharing information through communication is not only depends on sender but also recipient‟s experience

and interpretation to the information. Knowledge sharing often takes place with barriers such as difference in culture, language and tradition etc (Barson, 2000).

The information and knowledge consequent sharing are affected by social practices as the elements of corporate culture of the community. A kind of culture knowledge modification can be met because the sum of information can consider the knowledge in the context which is dependent on the creation of social group. Effective upon transparency in information and knowledge sharing can only be become in appropriate corporate culture which should be the correct routing of this modification. Therefore, the right corporate culture is very necessary.

2.2 Barriers in knowledge sharing

Barrier of knowledge system can classify into 3 mains barriers which are technology, organization and people (Barson, 2000). Kukko (2013) also supports Barson"s finding by classifying knowledge sharing in software business and acquisition growth into three different levels which are individual, organizational; and technological levels

(1) At individual level, knowledge sharing can be disappointedly failed when the pressure or the lack of confidence is experienced. The lack of individuality influences and motivation can reduce the ability in both knowledge sharing and retrieval. As I have mentioned earlier, communication skills, social network, time and trust can contribute to knowledge sharing barriers. The important thing for knowledge sharing is to select appropriate timing with the suitable group of audiences. Moreover organization culture, information or knowledge power, personality, relationship between information sender and receiver, public acceptance are other possible barriers to knowledge sharing (Riege, 2005).

Kukko (2013) also commented on individual level that trust can be a potential knowledge sharing barrier. Unfamiliarity might create awkwardness and resisting attitudes between information sender and audiences. Employees who are not familiar with each other will spend less time together and unwilling to conduct a beneficial and complete knowledge sharing. Furthermore, hierarchy in social class as well as knowledge background can also establish knowledge sharing barrier. The

person who has high levels of professional knowledge might pay less attention and refuse to consider others‟ knowledges. The acquisition of several companies can also support knowledge sharing barrier. People in unfamiliar environment or in new social network normally need time to adapt to the new environment and usually deny changing or learning new things. Lastly, many languages used in single working environments or organization can be one of the barriers at individual level as well.

Vladimir (2003) suggests more comment in the individual level relating to the fear of losing power. The tense and competitive organizations will probably experience this particular knowledge sharing barrier. The information senders often fear to share useful or proprietary knowledge to potential or fast-learning audiences. This directly and indirectly affects social class, social acceptance, wages and other related consequences.

At the individual level, there are 6 main barriers that relates to internal/personal resistance. The results the lack of active emotion toward new knowledge, the lack of communication skill, the unwillingness to share knowledge from sender to recipient, the lack of trust from each other, the risk from sharing proprietary knowledge, the fear of exploitation from others and the fear of contamination from down or smaller companies (Barson, 2000).

(2) Another important factor for knowledge sharing barrier is at the organization level. At Organization level, barriers can occur from missing or unclear linkage between Knowledge Management strategy and organization‟s goals. It can also be a result from the lack of leadership and managerial direction or problem from organization structure. In addition, inappropriate use of human, unplanned processes and inadequate resources can create huge impact on knowledge sharing failure (Riege, 2005).

Adding to the organization level within the merging companies, barrier may come from distance and knowledge gap between workers in the organization, the differences in infrastructure between merged companies, competiveness among one another. Moreover acquisitions may cause the increasing complexity of organization in term of culture, structure, system, management design etc. Complexity of organization may increase challenge to establish network connections for knowledge sharing processes. Acquisition required times and closed attentions from managers but

prior research found that not all companies pay attention on benefits of knowledge sharing. Furthermore, differences in organization culture may lead to barrier toward knowledge sharing within the acquisition companies (Kukko, 2013).

The main social barriers can come from language barrier in multinational company. Workers normally resist changing and fearing about learning and accepting new knowledge. High level of hierarchy, mismatch between personal and organizations, underestimate of lower levels, no audience backgrounds and the lack of feeling or emotion in knowledge sharing and retrieval can also maximize knowledge sharing failure (Vladimir, 2003).

(3) The last level of knowledge sharing barrier is the technology level. In term of technology barriers, it may come from lack of technical support, communication and training program, resistant of using IT system or mismatching between individuals‟ needs and requirements as well as IT system process. Moreover, Kukko (2013) has pointed out the 3 main aspects of barriers in technology level. Incompatible and reluctance of technology usage from the employees can build up knowledge sharing barrier as the employees refuse to change to unfamiliar procedures or new technology. As Insufficient duration for knowledge sharing leads to incompetent and inadequate knowledge sharing barrier and benefits. (Riege, 2005)

In addition, there are two main barriers in technology level. The first one which are incomplete and unclear of the organization‟s goals and strategies. The second factor is about legacy systems which refer to the difficulty in knowledge sharing among departments in organization. Specifically cross-categories barriers involved the failure of implementation of existing resource to support knowledge sharing processes. The lack of investment and development of human resources, information transmission mechanism and technological resources are also the supportive reason. Moreover, the neglect of rewarding to volunteered or assigned information senders who conduct useful knowledge sharing activities might create harshness or disappointment. Lastly, unsupportive culture causes rough knowledge sharing processes. Thus, overcoming culture barriers to sharing information and knowledge have more to do with how to design and implement the information and knowledge management effort than with changing the culture. (Barson, 2000)

Table 2.1 Summarize barriers to knowledge sharing in individual, operational and technology level

	Individual	Organizational	Technology
(Barson, 2000)	• Trust • Culture • Resistance • Fear of contamination • Risk from sharing proprietary • Fear of exploitation • Emotion • Communication skills	• Culture • Distance • Existing resources • Rewards • Targeting • Costs • Proprietary knowledge • Risk	• Legacy system • Incompatible and unclear goals and strategies • Lack of investment • Reward • Culture
(Vladimir , 2003)	• Fear of losing power • Fear to provide knowledge to colleague • Afraid of imitate their knowledge	• Language barrier • Resistance to change about new knowledge • High level of hierarchy • Mismatch between personal and organizations • Underestimate of lower levels • lack of feeling or emotion to send and receive knowledge • Background of audience	

Table 2.1 Summarize barriers to knowledge sharing in individual, operational and technology level (cont.)

	Individual	Organizational	Technology
(Riege, 2005)	• Trust • Communication skills • Social network • Time • Information/ knowledge power • Relationship • Culture • Lack of confidence • Lack of motivation • Personality	• Lack of Leadership and managerial direction • Missing or unclear linkage between knowledge management strategy and organization"s goals • Problem from organization structure • Inadequate resource • Inappropriate of human • Unplanned process	• Resist using IT system • Mismatching between individuals" need and requirement and IT system process • Lack of technical support • Lack of communication • Lack of training program
(Kukko, 2013)	• Trust • Language problems • Social networks • Time Relationships Knowledge background • Resistance attitudes	• Culture and attitude • Distance • Infrastructure difference • Complexity of the organization • Knowledge gap between organization and workers • Organization structure • System • Management design	• Incompatible and reluctance of technologies

The table below has shown the commonality barriers in knowledge sharing.

Table 2.2 Commonality barriers in knowledge sharing

Factors	(Barson, 2000)	(Vladimir, 2003)	(Riege, 2005)	(Kukko, 2013)
Individual				
• Trust	√		√	√
• Communication skills	√		√	√
• Social network/ relationship			√	√
• Time			√	√
• Information/knowledge power			√	√
• Culture			√	
• Lack of confidence	√		√	
• Lack of motivation			√	
• Personality			√	
• Knowledge background				√
• Resistance attitudes	√			√
• Fear	√			
• Risk from sharing proprietary	√			
• Emotion	√			

Table 2.2 Commonality barriers in knowledge sharing (cont.)

Factors	(Barson, 2000)	(Vladimir, 2003)	(Riege, 2005)	(Kukko, 2013)
Organizational				
• Lack of Leadership and managerial direction			√	
• Missing or unclear linkage between knowledge management strategy and organization‟s goals			√	
• organization structure /hierarchy/distance	√	√	√	√
• Inadequate resource			√	
• Unplanned process and system			√	
• Culture and attitude	√			√
• Infrastructure difference				√
• Knowledge gap between organization and workers				√
• Management design				√
• Language barrier		√		
• Resistance to change/ fear about new knowledge		√		
• Mismatch between personal and organizations		√		
• Underestimate of lower levels		√		
• Lack of feeling or emotion to send and receive knowledge		√		
• Background of audience		√		

Table 2.2 Commonality barriers in knowledge sharing (cont.)

Factors	(Barson, 2000)	(Vladimir, 2003)	(Riege, 2005)	(Kukko, 2013)
Technology				
• Resist and reluctance using IT system		√	√	
• Mismatching between individuals" need and requirement and IT system process			√	
• Lack of technical support			√	
• Lack of communication			√	
• Lack of training program			√	
• Insufficient duration			√	
• Legacy system	√			
• Incompatible and unclear goals and strategies	√			
• Lack of investment	√			
• Reward	√			
• Culture	√			

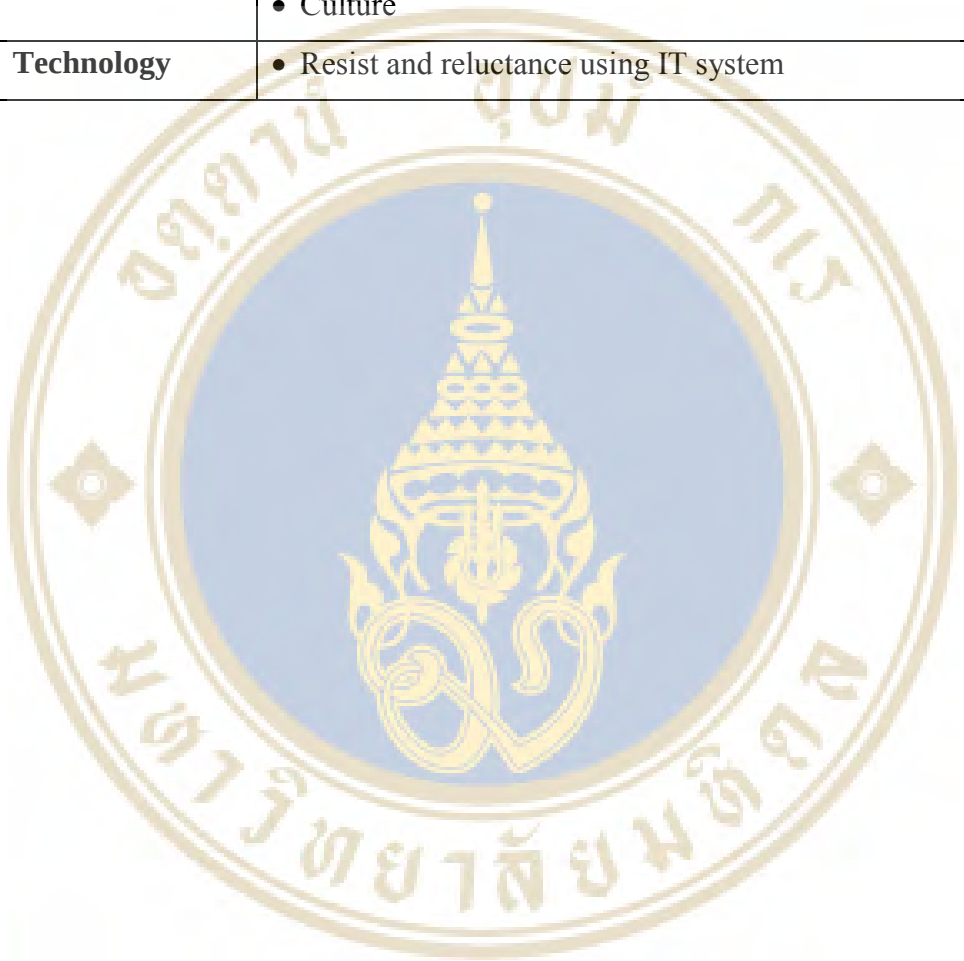
Furthermore, the high impact factors are listed out from and this study purposes the potential barrier factors in each are listed as table below.

Table 2.3 Summarizes the impact factors in individual and organizational level

	Impact factors
Individual	• Trust • Communication skills • Resistance • Relationship / Social network • Time • Information and knowledge power

Table 2.3 Summarizes the impact factors in individual and organizational level (cont.)

	Impact factors
	• Culture
Organizational	• Organization structure/ distance / hierarchy • Culture
Technology	• Resist and reluctance using IT system



CHAPTER III
METHODOLOGY

3.1 Research approach and design

3.1.1 Research Approach

This chapter describes methods that are being used in this research. It also mentions about the reasons for selecting the chosen method, research design, company selection and data collection.

There are two types of research approaches which are quantitative and qualitative research. Quantitative research approach requires a large number of respondents and implements appropriate formulas to calculate and analyze data. The outcome of quantitative research is basic, simple but reliable.

On the other hand, qualitative research is designed to reveal a target audience's range of behavior and the perceptions that drive it with reference to specific topics or issues. It uses in-depth studies of small groups of people to guide and support the construction of hypotheses. It involves primarily with individual or personal interaction such as in-depth interviews and group discussion during the process of data collection, data analysis and data measurement. The results of qualitative research are descriptive rather than predictive. The qualitative research methodology provides very detailing data which can lead to the analyze of fundamental causes (Anderson, 2006).

Qualitative research method aims to gain deep and inside information as well as to acquire better understanding from specific group of sample rather than collect the large sample of population and gaining surface or broad of information. It creates synergy among respondents, as they build on each other's comments and ideas. It can also establish the dynamic nature of the interview or group discussion process, which engages respondents more actively than is possible in more structured survey. (California State University, 2010).

This research selects in-depth interview as information collection instrument to collecting information from individual's perspective to address research and interview questions for better understanding of the respondents. The one on one in-depth interview enables the research to acquire in-depth knowledge and experience on particular individual. In-depth interview also ensures high response rate. Furthermore, it allows the opportunity to probe and response to immediate doubts which can enable the researcher to reach beyond initial responses and rationales. Interviewers may discover individual's opinion and feeling about issues and ideas, Discussion was conducted in order to explain in detail which helps deeply understand and get the same direction on both sides. Thus, open-end questions are allowed to use in this approach and interviewees might feel comfortable by one-on-one interview. Thus, there are opportunities to engage respondents to express their perspectives and ideas such as projective techniques and exercises, overcoming the self-consciousness that can inhibit spontaneous reactions and comments.

Furthermore, qualitative research method is flexible, effective, and able to interpret content along with environment situation than in quantitative research. There are many opportunities to observe, record and interpret non-verbal communication as part of a respondent's feedback, which is valuable during interviews or discussions, and during analysis (Merriam, 2002).

As a result, this research applies the qualitative research method for several unique aspects as it is able to contribute to rich and insightful results.

3.1.2 Research Design

The process of data collection starts with distributing interviewed question to interviewees via e-mail a day before interview session in order to make sure that they have prepared themselves to answer on interview questions. The background of knowledge, knowledge management and knowledge sharing was introduced before interview session has started. The interview session took approximately 30-50 minutes per respondent. Timeliness of interview may differ according to background knowledge of respondents.

The interviewed context is flexible and a semi-structure interview questions are used in this stage. There are 7 structured interview questions. However,

unstructured interview questions can be applied if necessary. Interviewee and interviewer have to actively and carefully listen to each other. Voice record is required in the interview as a reference. One-on-one basis interview is used in this research method and the participants might feel uncomfortable in sharing experience. Hence, informal interview might be implemented in order to lessen seriousness of the discussion and to create acquaintance.

3.2 Case Study: Siam City Cement (SCCC)

The company case study is Siam City Cement (SCCC) in Bangkok, Thailand. Siam city Cement was established in 1996. There are approximately 3,000 employees in the company. SCCC has 3 groups companies which are Siam City Concrete (Ready-mixed concrete), conWOOD (wood replacement products) and Khmer Cement Industry (cement trading). The market share of SCCC in Thailand is approximately 28 percents which is the second largest cement manufacturer in Thailand.

The interview was conducted at Head office of Siam City Cement, Klongtoey district, Bangkok. The samples of population are randomly selected which are mostly in operational level as they tend to be experienced knowledge sharing receivers. The samples of population are randomly picked from various departments which are People and Organization Performance, Pricing, Marketing and Business Improve Stakeholder Relations and Compliance, Production and Quality Control, Technical and Operation, Bangkok North communication, Bangkok West, Health Safety and Environment. The in-depth interview could capture information systematically as much as possible and could reflect the real situation or problem in individual and organization in wide perspectives. Mouton (1996) defines sample as a selection of component from overall population to find out something and all of samples or interviewees are willing to participate in this research.

3.3 Data collection

An interviewer collects information from respondents who response to series of questions. Information was collected from interview session to evaluate perception and knowledge of interviewees. The specific criteria in the sample was included as following

They should:

- Be adult age between 25 to 50 years old
- Be willing to participate
- Be in operational level or manager position
- Have worked at Siam City Cement at least 1 year or more
- Be of either sex or any race

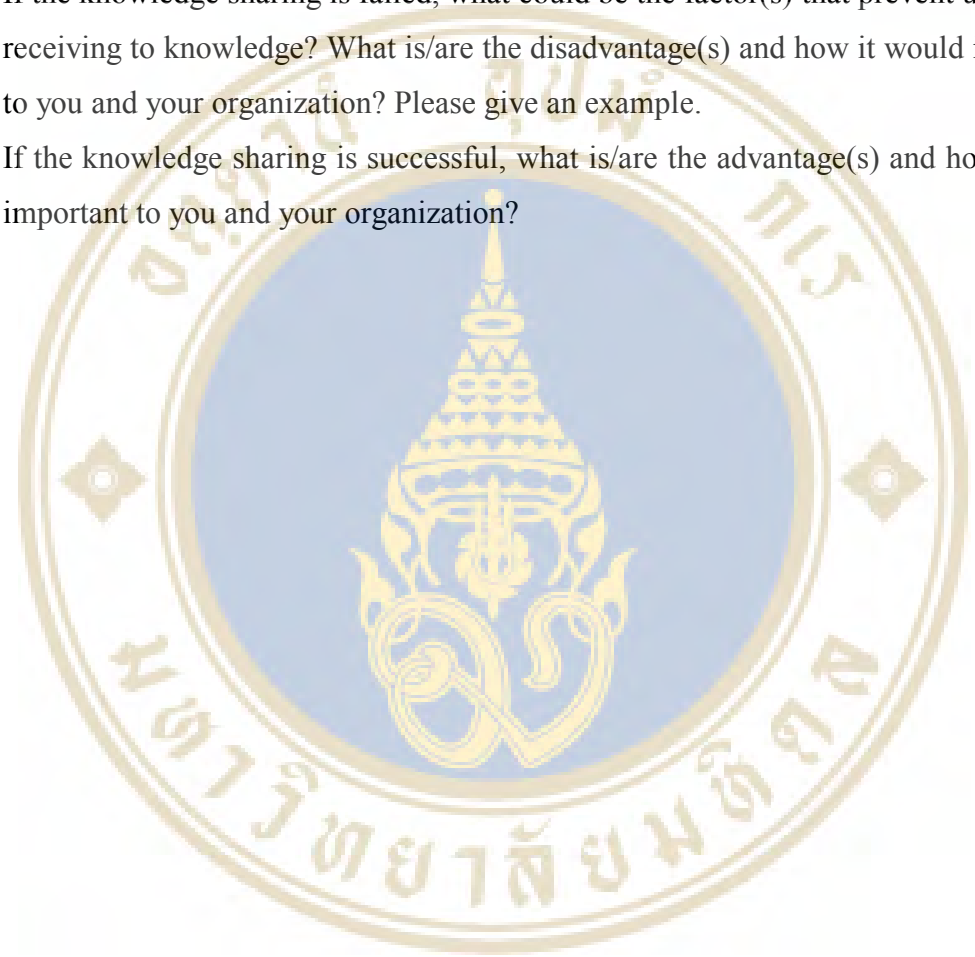
A convenient sample of 10 employees was selected; 2 respondents from managers position level and 8 respondents from operational level. At first pilot interview was conducted with 2 employees in operational level to make sure that all questions are clarity and validity.

The interview questions are focus on knowledge sharing receiver's perspective in 3 levels which are individual, organizational, and technology level. The one-on-one interview session was divided into 3 main parts. Firstly, introduction and background information of knowledge sharing and barriers in knowledge sharing to receiver were informed to all interviewees at the beginning of interview session. The second part is demographic data collection which is general information of interviewees including name, sex, age, qualification, position, department, and working period. And the third part is semi-structure interview questions to respondents.

The 7 mains interview questions that used to interview all respondents are shown as below.

1. What is the knowledge sharing in your organization, how often of knowledge sharing happen?
2. Who is/are related when sharing knowledge? Please give an example (s).
3. Have you ever been a knowledge sharing receiver?
    - If yes, whom did you receive knowledge from and in what content? Please list as many as people you remember.

4. Why do you perceive that the knowledge lenders know their knowledge?
    - Why do you think that you understand or do not understand the item shared? Please give an example (s)
5. What is/are the factor(s) or reason(s) that you are willing and unwilling to receive knowledge from those sender(s)? What is/are the reason(s) that you may not use the received information?
6. If the knowledge sharing is failed, what could be the factor(s) that prevent us from receiving to knowledge? What is/are the disadvantage(s) and how it would impact to you and your organization? Please give an example.
7. If the knowledge sharing is successful, what is/are the advantage(s) and how it is important to you and your organization?



CHAPTER IV
DATA ANALYSIS AND DISCUSSION

4.1 Demographic profile of respondents

The previous chapter presents the research methodology in this study. However, this chapter aims to answer the research questions by presenting data analysis that obtained from 10 respondents. The data analysis, research findings and recommendation are discussed. The qualitative data analysis is conducted to examine the barriers of knowledge sharing to receiver. Ten in-depth interviews are conducted within 2 weeks at Siam City Cement Company. The duration of the interview may last approximately 30 to 50 minutes. The data and information will then be collected and analyzed. In this study, respondents are Siam City Cement's employees. We randomly selected 10 respondents in this study. There are more female than male among respondents. Respondents include 2 employees in manager level and the remaining respondents are in operational level from several departments such as pricing, marketing, stakeholder relations and compliance, and health safety and environment etc. Two out of respondents are Master's Degree qualification and the rest are Bachelor's Degree qualification. There are 7 respondents who have work experiences for 1-2 years. There is also 1 person more than 2 years but less than 10 years, and 2 persons more than 10 years. Ages of respondents are between 25 to 50 years old. The following table presents the demographic profile from respondents by categorizing into gender, age, qualification, position, and working experience respectively.

Table 4.1 Demographic profile frequency of respondents

	Frequency	Percentage (%)
Gender		
Male	3	30
Female	7	70
Age		
25-35 years	8	80
36-45 years	1	0
More than 45 years	1	10
Qualification		
Bachelor's Degree	8	80
Master's Degree	2	20
Position level		
Operational	8	80
Manager	2	20
Working experience		
1-5 years	7	70
6-10 years	1	10
11-15 years	-	-
16-20 years	2	20

According to table 2.3 in literature review chapter, the table proposes and summarizes the commonality barriers in knowledge sharing to receiver in individual, organizational, and technology level. There are 7 main barriers in individual level which are trust, communication skills, resistance, relationship or social network, time, information and knowledge power, and culture. The result of interviews found that, there are 4 out of 7 barriers are mentioned which are trust, communication skills, time, and information or knowledge.

In organizational level, It involves 2 mains barriers which are culture and organizational or distance or hierarchy. From the results of the interview, none of the

respondent mentioned to the above two barriers. In the technology level, it has only one factor that has highest impact to knowledge sharing which is resistance and reluctance of using IT system. From the results of interview, none of the respondent concerns about barriers in technology level.

The table below shows the number of respondents and percentages of respondents that mentioned to barriers in each level.

Table 4.2 Number and percentages of respondents mentioned to barriers in each level

Barriers	Number of respondents	Percentages (%)
Individual level		
Trust	6	60
Communication skills	10	100
Resistance	-	-
Relationship or social network	-	-
Time	6	60
Information and knowledge	9	90
Culture	-	-
Organizational level		
Culture	-	-
Organizational structure/ Distance / Hierarchy	-	-
Technological level		
Resist and reluctance using IT system	-	-

4.2 Discussion and Finding

This study explores barriers of knowledge sharing process to receiver. It is important to define barriers of knowledge sharing in each level in order to establish

successful implementation of Knowledge Management. According to literature review in this study, barriers of knowledge sharing are divided into 3 levels which are individual, organization and technology level. From the results of interview, some respondents agree partially with some barriers.

Barriers in each level are firstly discussed and then followed by demographic discussion. From the result of one-on-one interview at individual level, communication skills receives the highest concerned aspect as it scores 100% from the respondents. This study found that all of respondents have concerned about communication skills among receivers and senders. This means communication skills are very important in knowledge sharing and it is the critical barriers in knowledge sharing process to receiver. Crawford (2006) clearly demonstrated that well and clear understanding of communication is a major forecaster of Knowledge Management skills in the workplace. In order to improve knowledge management process, leaders in organization need to enhance their level of communication skills. Ineffective communication may reduce capability to share, receive, create, and apply knowledge.

Communication skills from interview are defined as tone, voice, language, and ability to explain and transfer information and knowledge. All of respondents agree that lack of communication skills from sender of knowledge sharing may create negative feeling and responsiveness to receiver. It can also reduce motivation and willingness of receiver to receive the knowledge and could not gain knowledge effectively. Information sender who is lack of communication skills may decrease trustworthy from receivers' perspective. The second highest barrier that also has high impact to knowledge sharing is the information or knowledge power which 90% of respondents have concerned about. This barrier purely relates to content of the information. The main reason is about the complexity of knowledge content. The content is technical and difficult to understand which probably do not relate to their works. If receiver does not have any background in those particular fields, they may not know the real objective of content which will also take longer time to digest information. As a result, the receiver will normally judge the knowledge as an un-useful or unimportant information. The third rank of barrier is trust and time which each of the barrier received from 60% of the respondents. According to Riege (2005),

he found that trust could be a barrier between group and individual. Kukko (2013) also supports his statement on the impact of trust to barrier of knowledge sharing. Moreover, the results of interview have shown that some of respondents did not trust in senders whom share their knowledge to them. The possible reason might be the ability of the sender to respond and answer the questions from the receivers. The knowledge sender may not have a good preparation before share knowledge session. In addition, the knowledge sender always read script monotonically or only present repeated works as same as in the handout.

Nevertheless, there are many supportive reasons that time can be the factor of the barrier of knowledge sharing. Length of time during knowledge sharing session might be one of the reasons. The inappropriate duration of sharing session might affect the meditative absorption of the receiver, concentration or the busy receiver. Receiver may think that knowledge sharing wastes their valuable time. In addition, date of knowledge sharing can also be the barrier. The Knowledge sharing session that is conducted on Friday or during holiday period might create unwillingness or negative feeling to the receiver. This can lead to ineffective knowledge sharing to receiver. Servin (2005) discovered that knowledge management is effective when it share "right knowledge, in the right place, at the right time" and the right time is defined as the time that receiver are willing to receive the knowledge or the time that the receiver attempts and requires for knowledge (p.6).

In addition, there are some barriers that many researchers thought they would have high impact and effect to knowledge sharing. However, the respondents in this study do not concern about those matters.

For the individual level, there are three barriers of knowledge sharing which are knowledge resistance, relationship or social network and culture. For knowledge resistance and relationship or social network, they might not happen because most of respondents are in operational level and have low working experiences. Therefore, the respondents have to basically listen to their supervisor or people who have higher authority. For example, Siam City Cement Public Co.,ltd. which is a big and well known company in Thailand, has clearly defined roles and responsibilities to each position well. So it will have lower chance of resisting

knowledge sharing. In addition, majority of the employees try to improve their performance in order to promote to higher position. Therefore, respondents will not resist to changes and are willing to learn new things to improve their knowledge and capabilities for future growth opportunities. Furthermore, employees normally have teamwork assignments from the management or supervisor so communications among one another are often required. Thus, relationship and social network might not be the obstacle of knowledge sharing.

For organizational level, there are two barriers that respondents did not prioritize as the knowledge sharing barriers which are culture and organizational structure or distance or hierarchy. These barriers are listed as commonality barriers. Employees have to work aligned with organizational policies and contribute to mission and vision of the company. Therefore, organization structure is not a barrier of knowledge sharing because each department has the supervisor or management level to report associated works or communicate knowledge among one another.

On the other hand, the results of interview showed that policy is the barrier that extends from commonality barrier. There are 4 out of 10 respondents that concern about policy. Employees sometimes are not allowed to share knowledge to other people, department, or organization. This might concern information confidential or privacy.

For technology level, there is no respondents who concerns and mentions about technology as the barrier inhibited to knowledge sharing process. The possible reason might relate to birth generation. Most of the respondents are in generation Y which is individuals born during 1977-1997 (Smith, 2009). One of the outstanding characteristic of Generation Y is technology oriented. They can use technology in their jobs (Wallace, 2007). As a result, the advancement of technology is not the obstacle.

Base on gender analysis, all male respondents have mentioned about barrier in organizational level. Nevertheless, the factors that respondents have mentioned are dissimilar to commonality barriers which proposed in table 2.3. Policy is a concerned barrier for 3 male respondents. On the other hand, there is only one female who considered policy as a barrier in organization level. This implies that barriers in knowledge sharing are different among gender. It can also suggests that

males might be more commitment than females. Ma and Yuen (2011) found that males tend to have stronger desire and be a career learner than female. Therefore, it is possible to imply that males might devote and commit to organization than females.

For age analysis, trust and information or knowledge power have strong impacts and are the critical factors on knowledge sharing session at every age. Trust is the factor that can surprisingly attract attention and establish willingness of absorbing new knowledge. Swift and Hwang (2013) found that trust is the factor that contributes to interpersonal knowledge sharing and learning process in organization. Sender who transfers knowledge unprofessionally, such as poor communication posture, low communication skills and inappropriate dress code, may destroy trust from receiver. Additionally, information or knowledge power is also an effect to knowledge sharing. If the information or knowledge content is not sufficient and powerful, receiver who is young and new to the organization might not understand the message correctly. Thus, this leads to misunderstanding and useless information sharing. Moreover, communication skills and time specifically impact to knowledge sharing under the groups of respondents aged between 25 to 45 years old. Communication skills can directly affect the content and knowledge that sender try to share to the audience. As this research has mentioned before, length of knowledge sharing session relates to effectiveness of knowledge application especially to Generation Y receivers. Generation Y people normally require flexibility in their schedules and in workplace (Wallace, 2007). Generation Y employees seem to prefer excitement which humdrum and repetitious works are not preferable. Therefore, the receivers might lose focus and concentration on lengthy knowledge sharing session.

Regarding of difference in working experiences, all respondents concern about communication skills during knowledge sharing session. Yahya (2010) stated that "The success of effective communication skills contributes to successful knowledge transfer" (p.6).

For qualification analysis, respondents in both Bachelor's and Master's degree raise the concern on the factors of trust, communication, time, and information or knowledge power. Communication skills are necessary to employees in

organization. Communication is factor that allows employees to create network and share knowledge (Disterer, 2001).

For position level analysis, respondents in manager level point out the emphasis on trust, communication skills, and information or knowledge power. Nevertheless, they think that time does not generate any effects on knowledge sharing session. On the contrary, respondents in operational level agree that trust, communication skills, time and information or knowledge power are major barriers affected to knowledge sharing.

4.3 Recommendations

As I have mentioned in previous section, there are still some barriers that extended from the above discussion which respondents do not concern. This research shows that culture does not have significant impact to individual and operational levels. However, the literature reviews prove that culture is the critical factor associated to knowledge sharing barriers in both individual and organizational level. Nonaka (1955) stated that culture is the factor that can determine the organization success or failure. Furthermore Riege (2000) and Richard (2005) found that the organization culture can possibly anticipate the consequence of knowledge sharing. From the result of data analysis and discussion, 80% of the respondents from SCCC are in operational level with working experience of less than 5 years. Therefore, organizational culture might not completely or successfully penetrate into the employees' mindsets. As a result, the organization should raise awareness of balancing both visible and invisible dimensions of culture. This can obviously be done by demonstrated the importance of sharing information and knowledge. Some suggestive points can derive by aligning information and knowledge sharing with the organization culture. Firstly, a visible connection is made between sharing information, knowledge, organization goals and problems for creating an information and knowledge sharing culture. Next solution is the linkage of the core values of the organization, sharing information and knowledge by making them consistently with peers' opportunities and managers' considerations. For sharing information and

knowledge, human networks is one of the key driving factors in an organization which can be conducted by building a sharing culture to enhance the existing networks. Finally, allowing and encouraging the employees to confidently share ideas and insights which will lead to strong relationship between workers and managers as communication skills.

In addition, policy is the factor that effect to knowledge sharing in Siam City Cement. According to the literature reviews in this study, there is no researcher mentioned and concerned about organization policy. Employees in operational level basically perform their work aligned with organization's policies. Policy may indirectly create culture in organization especially to those in operational level. Therefore, Management level in organization should consider or adjust policy to reduce or minimize knowledge sharing barrier in order to enhance knowledge sharing capabilities and optimize competitive advantage in global market.

Finally, in order to reduce the barriers of knowledge sharing, organization have to focus more on continuous knowledge sharing activities to employees in every stage. The receiver can improve and practice knowledge sharing by applying knowledge to day-to-day working basis which can gradually help them to improve their performances and increase knowledge backgrounds. Moreover, organization should highlight the benefits and advantages of receiving knowledge in personal and organizational perspectives in order to create awareness to employees and reduce barriers of knowledge sharing in the organization.

CHAPTER V
SUMMARY AND SUGGESTION

5.1 Summary of the study

This chapter presents the summary of the main points of this study. Also, the limitations of the research are discussed as well as suggestion for further research. This study aims to explore the potential barriers of knowledge sharing process in receivers' perspectives. Even though, there are many researches corresponding to these particular concerns in many industries or organizations, they mostly conducted in Western countries. Therefore, this study intends to focus on the organization in Asian country and Thailand is chosen in this research.

Additionally, knowledge with good management can help the organization to accomplish goals and objectives as well as sustainable growth. This study examines the barriers of knowledge sharing in order to operate process of knowledge management and knowledge sharing effectively. Knowledge management and knowledge sharing barriers were discussed in this study. The 3 main components of knowledge sharing are sender, knowledge, and receiver. Knowledge sharing represents the expression of knowledge between sender; who has knowledge and transfer to others; and receiver; who received knowledge that shared or transferred by sender. This research also contributes on knowledge management by indicating knowledge sharing barriers in organization. This study also shows the impact of discussed factors in knowledge sharing. Knowledge sharing can occur in different levels such as personal, organizational, and technological level. Moreover, there are several barriers to knowledge sharing process between senders to receivers. This study classified knowledge sharing barriers into 3 level which are individual, organization and technical level. There are 10 barrier factors that have commonality impact to knowledge sharing proposed in literature review. Furthermore, the findings of the study will help company understand the causes and possible barriers of knowledge sharing. This research also suggests that communication skill is the significant barrier

that directly impacts the knowledge sharing process especially in individual level. Furthermore, the advancement of knowledge is also inhibiting receiver to receive knowledge. This research also highlights the importance of culture and policy aspects. They are essential to knowledge sharing in both individual and organizational level.

5.2 Limitations of the study

There are some limitations existing in this study. Firstly, this study is conducted in specific context, Thailand, which could not apply to global context. Thus, the research finding can suitably apply to organization in Thailand. Secondly, there are too few samples of population. Respondents are randomly picked from various departments. Hence, there are some department and position level that have not been chosen. Moreover, most of respondents are in operational level which weights to 80% of all sampled population. Therefore, the result of the data analysis may be biased or refer mainly on operational perspectives. Moreover, in-depth interview is the qualitative research method which takes quite long time per each respondent.

5.3 Suggestion for further research

The further research could collect data from all level in organization and increase the sample size or number of respondents in order to obtain systematic and meaningful outcomes as well as standardize the research analysis and finding. The future research should also examine other hidden factors that inhibit in knowledge sharing process to receiver such as core value, policy, culture and characteristic of employees in difference generation. Moreover, further research would be revolved more than single case study in order to generate reliable outcome.

REFERENCES

Abdul Kalam, A. (2004). Digital Library and its multidimensions. *President of India's speech at the "Inauguration of International Conference on Digital Libraries (ICDL) – 2004*. New Delhi.

Alavi, M. (1999). Knowledge Management System: issues, challenges, and benefits, Communication of the Association for Information Systems, . *Volumn 1, Article 7, February* .

Anderson, J. D. (2006). *Qualitative and Quantitative research.* Retrieved 12 6, 2013, from Imperial County Office of Education: http://www.icoe.org/webfm_send/1936

Barson, R. F. (2000). Inter- and intra-organizational barriers to sharing knowledge in the extended supply chain. *e2000 Conference Proceedings*. University of Nottingham, Nottingham.

Broadbent, M. (1997). The emerging phenomenon of knowledge management. *The Australian Library Journal, Feb* , pp.6-24.

California State University. (2010). *DATA COLLECTION STRATEGIES II:Qualitative Research*. Retrieved 10 1, 2013, from California State University Long Beach: http://www.csulb.edu/~msaintg/ppa696/696quali.htm

Crawford, C. B. (2006). The Critical Role Of Communication In Knowledge Organizations:Communication Apprehension As A Predictor Of Knowledge Management Functions. *Journal of Knowledge Management Practice, Vol. 7, No. 4* .

Devenport, T. H. (1998). How organizations know what they know. In *Working Knowledge* (p. 5). Boston: Harvard Business School Press.

Disterer, G. (2001). Individual and Social Barriers to Knowledge Transfer. *34th Hawaii International conference on System Sciences*, (pp. 1-6). Hawaii.

Frost, A. (2010). *Defining Knowledge, Information, Data*. Retrieved 12 6, 2013, from KMT:An Educational KM Site: http://www.knowledge-management-tools.net/knowledge-information-data.html

Gunjal, B. (2005). Knowledge Management: Why do we need it for corporate. *Malaysian Journal of Library & information Science,Vol.10, no.2,Dec* , pp.37-50.

Kukko, M. (2013). Knowledge Sharing Barriers of Acquisitioned Growth: A Case Study from a Software Company,. *International Journal of Engineering Business Management* .

Lavrakas, P. J. (2008). *Encyclopedia of Survey Research Methods,*. SAGE Publications, Inc.

Ma.WWK. (2011). Gender Differences of Knowledge Sharing in Online Learning Environment. *Journal ofComputer Assisted Learning* , 116-128.

Mouton, J. (1996). *Understanding social research.* London: Van Schaik Publishers.

Peter E. Swift, A. H. (2013). The impact of affective and cognitive trust on knowledge sharing and organization learning. *Learning Organization* , 20-37.

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of knowledge management, VOL.9 NO.3* , pp.18-35.

Servin, G. (2005). *ABC of Knowledge Management.* London: NHS National Library for Health: Knoeledge Management Specialist Library.

Sharan B. Merriam, a. a. (2002). *Qualitative Research in Practice: EXAMPLES FOR DISCUSSION AND ANALYSIS.* San Francisco.

Smith, R. (2009). *White Paper on Understanding Generation Y and their Perception of e-Government.* Singapore: National University of Singapore.

Takeuchi, N. I. (1995). *The Knowledge-Creating Company.* Oxford: Oxford University Press.

Valdimir, B. (2003). Culture Barrier in Knowledge Sharing. *E+M Ekonomics and Management, Liberec,vol.6,special issue* , pp.57-62.

Wallace, K. (2007). *Understanding and Managing Generation Y.* USA: University of Kansas.

Yahya, A. (2010). Communication skills as enabler to knowledge transfer in SMEs. *ISSN:1985-7012 Vol.3* , p. 6.